

April 2005 Exam Cycle

PROFESSIONAL ENGINEER and PROFESSIONAL LAND SURVEYOR EXAMINEE INSTRUCTIONS

GENERAL INSTRUCTIONS TO ALL EXAMINEES:

The following schedule indicates the time when doors will be opened for seating:

FRIDAY, April 15, 2005

- Professional Engineer and National Professional Land Surveyor Examinations - 7:00 A.M.

SATURDAY, April 16, 2005

- California Professional Land Surveying Examination - 7:00 A.M.
- California Seismic Principles - 8:30 A.M.
- California Engineering Surveying - 1:30 P.M.

With variations such as weather, traffic conditions, parking, examinee population, etc., the Board cannot predict the exact time that the exams will begin. Therefore, all examinees are required to arrive at their exam room at the time the doors open. Examinees who arrive at the exam room after the examination instructions have begun will be considered LATE and will not be allowed to take the examination and will forfeit the application fee. **This policy applies to both the morning and afternoon sessions.**

Bring this information sheet with you to the exam. It is important that you read and understand it before the exam. On the day of the exam, you will be required to sign a statement which certifies that you have read and will abide by these instructions.

PHOTO I.D. - In order to gain entrance into the testing area, a photo ID is required and you will not be admitted without one. Identification will ONLY be accepted if it meets ALL of the following criteria:

1. Issued by a state or federal governmental agency (including military IDs, other U.S. states and foreign countries) [Student identification cards or employee identification cards will NOT be accepted]
2. Contains your photograph
3. Contains your visible signature
4. Contains your printed (typed) name

If you do not have identification which meets ALL of the above criteria, you will NOT be allowed to sit for the examination. THERE WILL BE NO EXCEPTIONS.

EXAMINEES SUBJECT TO SEARCH - All examinees are subject to search of their persons and personal belongings while at the examination site. The purpose of this policy is to ensure the safety of all those attending the examination site and to maintain the integrity and security of the applicable examination. (See Title 16, California Code of Regs. sec. 442) By accepting admission to the examination site, each examinee willingly consents to submit his or her belongings, briefcases, backpacks, or other parcels to examination proctors or other Board staff at any time while at the examination site for purposes of detecting and seizing any unauthorized materials or items. Any conduct that results in a violation of security or disrupts the examination may result in the confiscation of the examinee's examination, the examinee's removal from the testing site, the voiding of examination results, and the forfeiture of all application fees.

INSTRUCTIONS TO EXAMINEES - These instructions supplement the instructions printed on/in your test booklet. In case of conflict, these instructions take precedence over the instructions on/in the test booklet.

NCEES POLICY REGARDING THE USE OF MECHANICAL PENCILS - The National Council of Examiners for Engineering and Surveying (NCEES) has adopted a policy which requires all examinees to use the mechanical pencils NCEES provides at the examination site. **You can not use your own personal writing**

instrument. Examinees must use **NCEES-issued mechanical pencils only.** These pencils will be distributed at the examination site. The pencil will be pre-loaded with 0.7-mm HB lead. This is the only writing instrument allowed. **Examinees may NOT bring lead or erasers.** If additional lead or an eraser is needed during the examination, raise your hand and a proctor will issue an additional pencil. After the exam, you may keep this pencil with our compliments. **This policy applies to all examinees taking any PE examination.**

EXAM SECURITY - Failure to follow oral and written instructions will result in your examination being voided and forfeiture of your application fee. Conduct which results in a violation of security or disrupts the administration of the examination could result in your test being confiscated, your dismissal from the examination site, and your exam being voided and not scored (See Title 16, California Code of Regs. sec. 442). Conduct which jeopardizes the integrity of the examination is considered to be a misdemeanor and in violation of Section 123 of the Business and Professions Code and may result in the imposition of a fine up to \$10,000. **Examples of misconduct include, but are not limited to the following: writing on anything other than designated exam material (designated exam materials consists of your exam booklet, solution booklet, and answer sheet); writing or erasing after time is called; looking at another examinee's material; talking during the exam; using an unauthorized calculating device; and using cell phones for any purpose during the examination. You may not communicate or share reference materials, calculators, or any other exam materials with other examinees during the examination.** You may not attend this examination only to review or audit test materials. You may not copy any portion of the examination for any reason. **REMINDER:** The **ONLY** material you are allowed to write on during the examination is your exam book, solution booklet (if you have one), and answer sheet. **WRITING OR MARKING ON ANY TYPE OF CHART OR GRAPH (this includes psychometric charts) IS PROHIBITED UNLESS IT IS CONTAINED IN YOUR EXAM BOOKLET.** If you are found writing on any other material, you will be removed from the testing area, your exam will not be scored, and you will not be allowed to continue your exam.

NOTICE REGARDING THE *NEWLY REVISED* CALCULATOR POLICIES FOR EXAMINATIONS ADMINISTERED BY THE CALIFORNIA BOARD FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS FOR THE APRIL 2005 EXAMINATION CYCLE.

There are different calculator policies that apply to particular examinations that are administered by the Board, namely the **NCEES Calculator Policy** and **California Board Calculator Policy.**

The NCEES Calculator Policy prohibits the use of ANY CALCULATING DEVICE NOT MENTIONED BELOW:

- **Hewlett-Packard:** 9s, 33s
- **Casio:** FX 115 MS, and FX 115 MS+
- **Texas Instruments:** 30X IIS, 30X IIB, 36X Solar

These calculating devices mentioned above are the **ONLY** calculating devices that are allowed to be used on any NCEES examination administered by the Board.

The NCEES Calculator Policy stated above applies to any NCEES Professional Engineer Examination and the NCEES Professional Land Surveyor Examination.

The California Board Calculator Policy is as follows:

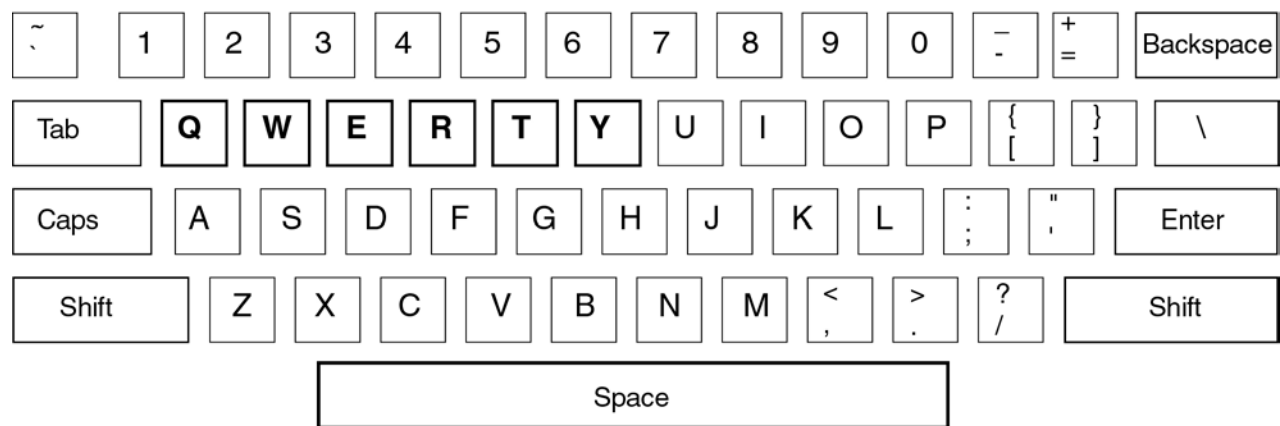
The use of any calculating/computing device having a QWERTY keypad arrangement similar to a typewriter or a computer keyboard during the exam is **strictly prohibited.** **The following devices are also prohibited, whether or not they have a QWERTY keypad function:** palmtop, laptop, handheld or desktop computers, calculators, data banks, data collectors, personal data assistants (PDA) and organizers.

Calculators with other alphanumeric keypads are acceptable. Notwithstanding the above, the Board or its designees have the right to prohibit the use of any device which, in the opinion of the Board, may pose a threat to exam security.

The California Board Calculator Policy stated above ONLY applies to the following State-Specific examinations:

- California Professional Land Surveyor Examination
- California Seismic Principles Examination
- California Engineering Surveying Examination

ONE EXAMPLE OF A "QWERTY" KEYPAD



ELECTRONIC DEVICES NOT ALLOWED IN THE EXAMINATION ROOM - Electronic devices including but not limited to **cell phones, pagers, personal data assistants (PDAs), scanners, cameras, radios**, or any calculating device which, in the opinion of the Board, may pose a threat to exam security **SHALL NOT BE BROUGHT INTO THE EXAMINATION ROOM**. If any of these items are brought into the examination room, you will be **required to leave them at your own risk inside a box or container inside the examination area**. **The Board assumes no responsibility or liability for any of these prohibited items**. You may retrieve these items from the box/container after the examination. If you fail or refuse to surrender the items to the Board's representatives upon request, **prior to the beginning of the examination**, you will be removed from the examination for failing to comply with the laws and policies regarding examination security and subversion. If you are found to have such devices with you **during** the examination, the item(s) will be confiscated and you will be removed from the examination. In addition to the items being confiscated, the incident will be reported to the Enforcement Unit of the Board for investigation as a possible violation of the laws regarding examination security and subversion. Penalties for such a violation can include, but are not limited to, your examination being voided and your examination fee being forfeited. **LEAVE THESE DEVICES IN YOUR CAR OR AT HOME!**

REFERENCE MATERIALS - **"POST-ITS" WILL BE PERMITTED AS BOOK TABS ONLY (must be attached prior to entering the testing area, as a pad of "POST-ITS" will not be permitted)**. **ALL PE EXAMS ARE ENTIRELY OPEN BOOK**. ALL FORMS OF NOTES ARE PERMITTED; HOWEVER, THEY MUST BE PERMANENTLY BOUND (I.E. STITCHED OR GLUED) OR FASTENED SECURELY IN ITS COVER BY FASTENERS WHICH PENETRATE ALL PAPERS, e.g., RING BINDERS, SPIRAL BINDERS, PLASTIC SNAP BINDERS, BRADS, SCREW POSTS, or STAPLED. BLANK WRITING TABLETS, UNBOUND TABLES, OR UNBOUND NOTES ARE NOT PERMITTED IN THE TESTING AREA. Examinees observed with **unbound reference materials** may be removed from the testing area and not allowed to continue the examination. **Examinees writing on anything other than exam materials distributed by proctors will be in violation of the Board's exam security laws and policies (see Exam Security)**. You are permitted to bring as

many reference materials into the testing area as one trip will permit. Fire Codes require that all aisleways be kept clear.

SITE INFORMATION/CONDITIONS - Due to insufficient parking facilities at some exam sites, **you should allow ample time to park and reach the testing area by the time the doors open!**. Be prepared to pay for parking. Be prepared for either warm or cold temperatures, as exam sites may not have adequate heating and cooling capabilities. Earplugs for sound suppression are allowed in the event of unavoidable noise as a result of other events scheduled at the exam site. **The use of headphones inside the testing area is prohibited. Wearing hats with visors during the examination is strictly prohibited. Eating, drinking, or tobacco use will not be permitted inside the testing area.** You may bring seat cushions into the testing area. You will vacate the testing area after each exam session. You should make arrangements to bring your own food and beverage for lunch; however, some exam site locations offer food service. Contact your particular exam site for more information.

SPECIAL ACCOMMODATIONS - If you required special accommodations, you should have completed the NCEES *Questionnaire for Applicants Requesting Special Accommodations Form* available on the Boards website. This questionnaire must have been received by NCEES at least **60 days before of the exam date**. Without prior approval, **NO** exceptions or special accommodations will be granted. **Example:** Examinee brings his/her own chair: if this request was not submitted to NCEES at least 60 days before the exam, examinee will not be allowed to bring the chair into the testing area. **Example:** Examinee is a diabetic who requires food during the examination: if this request was not submitted to NCEES at least 60 days before the exam, the consumption of food at the table during the exam will not be allowed.

ADMISSION PROBLEMS - At all exam sites a "**Problem Table**" is available for those examinees who did not receive an admission notice or who need assistance. The "Problem Table" will be available Thursday, April 14, from 2:00 p.m. to 3:00 p.m. The "Problem Table" will also be available Friday, April 15, and Saturday, April 16, beginning 30 minutes prior to the opening of the doors.

EXAM RESULTS/CHANGE OF ADDRESS - The Board will post the release dates of the examination results on our website at www.dca.ca.gov/pels and on our recorded message at (916) 263-2222. In order to receive your results, your address must be current. All address changes must be submitted in writing to the Board office. **NOTE:** The names and addresses of Board licensees are public records and are published in both electronic and print media. You may use a home address, a post office box, or a business address.

METRICS - Each Professional Engineer examination uses dimensional units that reflect current practice in that discipline; e.g., a discipline such as Civil uses a mixture of USCS and metric units.

COMMENT FORMS - This form is available to examinees in order to make comments and to challenge specific test problems on the examination. At the conclusion of an exam, you may request a Comment Form from the proctor at the door. You must use one form per test question. This comment form is to be completed at home and returned to the Board office within ten (10) days of the examination. Comment forms are also available on the Board's web site. You may NOT copy examination problems during or after the examination for inclusion on the comment form.

RESCHEDULING - If you fail to appear, or are late for the examination and are not admitted, or do not pass the examination, you will be required to pay another fee to reschedule.

TAKE-HOME EXAMINATION - The Board must ensure that California licensed Professional Engineers and Professional Land Surveyors are familiar with the provisions of the Professional Engineers Act, the Professional Land Surveyors Act, and the Board Rules. Business Professions Code sections 6755.1 and 8741.1 require the Board to administer a test on the State Laws and Board Rules to all Professional Engineer and Professional Land Surveyor applicants. To be licensed as a Professional Engineer or Professional Land Surveyor in California, you must take and pass the appropriate Take-Home examination. The PE and PLS Take-Home examinations are located on the Board's website. This should be returned within thirty (30) days after the PE/PLS exam. While the Board will accept and grade this examination after the thirty day period, your license could be delayed significantly if you pass the other part(s) of the examination and the Take-Home examination has not been received. *The*

Professional Engineers Act, The Professional Land Surveyors Act, and the Board Rules are located on the Board's website and describe the important laws, rules, and regulations pertaining to the practices of professional engineering and professional land surveying and are to be used as references for the Take-Home examination. If you want a bound "hard-copy" of *The Professional Engineers Act, Professional Land Surveyors Act, and Board Rules*, please mail a written request and a check or money order for \$5.00 (payable to the Department of Consumer Affairs) to the Board. You may use other reference material as well. All questions have equal weight. **You must achieve a minimum of 70% to pass this examination.** If you do not achieve a passing score, the Board will mail a notice to you, requesting you to retake this examination. You will not receive a license number until you pass the Take-Home examination.

SPECIFIC INSTRUCTIONS FOR:

CHEMICAL, CIVIL, ELECTRICAL, and MECHANICAL PROFESSIONAL ENGINEERING EXAMINATIONS and NATIONAL LAND SURVEYING EXAMINATION

These examinations are designed, developed and graded by the National Council of Examiners for Engineering and Surveying (NCEES). The California Board, as well as all other State Boards throughout the United States and Territories, purchases these exams from NCEES. Each State Board is responsible for the administration of these exams. It is recommended that you visit the NCEES website to review the latest test specifications for the PE or PLS exam that you are scheduled to take. Their website address is www.ncees.org. These examinations are developed with problems that will require a variety of approaches and methodologies including design, application, and operations. Some problems may require knowledge of engineering economics.

REPORTING OF EXAMINATION SCORES

The reporting of the scores for the NCEES examinations listed above have changed. NCEES has recommended that all State Boards represent the scores in a ***converted score format***, which is described below. To that end, the score you will receive will be represented in the ***converted score format***.

Examinees will receive a report of "pass" or "fail" on the examination. A minimum total converted score of 70 must be achieved in order to pass the examination. Converted scores are obtained by converting the number of questions answered correctly to a scale of 0 to 100. The converted score of 70 is not a percentage of the total number of questions answered correctly; it represents the minimum level of performance judged necessary by NCEES to demonstrate minimum competence. For a more detailed explanation of the ***converted score format*** please go to the NCEES website at www.ncees.org, under the Frequently Asked Questions (FAQ) category.

The Chemical examination will be entirely multiple-choice (M/C) and all problems are mandatory. There will be 40 problems in both the A.M. and P.M. portions of the exam.

The Civil examination will be administered in a breadth and depth format. The **A.M.** portion will focus on the breadth of civil engineering. This portion of the exam contains 40 M/C problems from all five areas covered in the civil engineering examination. These areas are: **Environmental, Geotechnical, Structural, Transportation and Water Resources**. It will be no-choice format (all problems will be mandatory). The **P.M.** portion will focus on the depth of civil engineering. This portion of the exam focus more closely on a single area of practice in civil engineering. Examinees must choose **one** of the five areas (depth modules) and will work all problems in the depth module chosen. Each depth module contains 40 M/C problems.

The Electrical examination will be administered in a breadth and depth format. The **A.M.** portion will focus on the breadth of electrical and computer engineering. This portion of the exam contains 40 M/C problems from the general field of electrical and computer engineering. It will be no-choice format (all problems will be mandatory). The **P.M.** portion will focus on the depth of electrical and computer engineering. This portion of the exam focus more closely on a single area of practice in electrical and computer engineering. Examinees must choose **one** of the three areas (depth modules) and will work all problems in the depth module chosen. The three depth modules are:

Computers, Power, and Electronics, Controls, & Communications. Each depth module contains 40 M/C problems. Note:- The 2002 edition of the National Electrical Code applies to any code-related problem.

The Mechanical examination will be administered in a breadth and depth format. The **A.M.** portion will focus on the breadth of mechanical engineering. This portion of the exam contains 40 M/C problems from all three areas covered in the mechanical engineering examination. These areas are: **HVAC and Refrigeration, Machine Design, and Thermal and Fluid Systems.** It will be no-choice format (all problems will be mandatory). The **P.M.** portion will focus on the depth of mechanical engineering. This portion of the exam focus more closely on a single area of practice in mechanical engineering. Examinees must choose **one** of the three areas (depth modules) and will work all problems in the depth module chosen. Each depth module contains 40 M/C problems.

The National Professional Land Surveying examination is a 6 hour examination (4 hours in the A.M. and 2 hours in the P.M.). This examination will be entirely multiple-choice (M/C) and all problems are mandatory. There will be 67 problems in A.M. portion and 33 problems in the P.M. portion of the exam.

Your answer sheet **MUST** be completed with your name and other information as required. **FAILURE TO FOLLOW THE WRITTEN INSTRUCTIONS WILL DELAY THE RESULTS OF YOUR EXAM.** The answer sheet must be used to record answers to the M/C problems. You must blacken the appropriate circles completely and erase completely any incorrect marks. Calculations for M/C problems should be done in your test booklet but will not be scored. Each correct answer is worth one point. There is no penalty for guessing on any of the M/C problems. **Answers marked in the test booklet will not be counted or graded and additional time will not be allowed in order to transfer answers to the machine scoreable answer sheet (scantron). IT IS THE RESPONSIBILITY OF THE EXAMINEE TO ENSURE THAT ALL TEST MATERIALS ARE RETURNED TO THE PROCTOR. FAILURE TO DO SO WILL RESULT IN YOUR EXAM NOT BEING SCORED AND DISCIPLINARY ACTION WILL BE TAKEN.**

SPECIFIC INSTRUCTIONS FOR:

CALIFORNIA SPECIAL CIVIL ENGINEER AND LAND SURVEYING EXAMINATION

CALIFORNIA SPECIAL CIVIL EXAMINATIONS - The State-specific special civil examinations (CALIFORNIA SEISMIC PRINCIPLES and CALIFORNIA ENGINEERING SURVEYING) are designed, developed, administered, and graded by the Board. It is recommended that you go to the Board's website to review the test plans, reference lists, and *Information for Examinees* for these examinations. **BOTH EXAMINATIONS ARE OPEN BOOK.** You will have **two and one half (2 ½) hours** to complete each examination. Both examinations are entirely M/C. All problems are mandatory. There is no penalty for guessing. The Seismic Principles examination consists of *approximately* 50 problems; the Engineering Surveying examination consists of *approximately* 50 problems. **IT IS THE RESPONSIBILITY OF THE EXAMINEE TO ENSURE THAT ALL TEST MATERIALS ARE RETURNED TO THE PROCTOR. FAILURE TO DO SO WILL RESULT IN YOUR EXAM NOT BEING SCORED AND DISCIPLINARY ACTION WILL BE TAKEN.** In order for you to become a licensed civil engineer, you must pass all four examinations (8-hr. NCEES, Seismic Principles, Engineering Surveying, and Take-Home).

California Seismic Principles - The 2001 California Building Code (2001 CBC) applies to any code-related problem.

CALIFORNIA PROFESSIONAL LAND SURVEYING EXAM - The State-specific California Professional Land Surveying Examination is designed, developed, administered and graded by the Board. It is recommended that you go to the Board's website to review the test plan for this examination. **THE ENTIRE EXAMINATION IS OPEN BOOK.** You will have **four hours** to complete the examination. The exam consists of **four** design-essay problems. All problems are mandatory. Each design-essay problem will have its own solution pamphlet. Answers marked in the test booklet will not be counted or graded and additional time will not be allowed in order to transfer

answers to the solution pamphlet. Additional instructions will be provided in the test booklets. You MUST RETURN ALL examination materials, which include the test booklet, and all USED AND/OR UNUSED solution pamphlets. Upon completion, place all materials (used and/or unused) on top of your envelope. Once your proctor has verified that ALL materials are accounted for, you and your proctor will be required to initial the envelope, verifying that all materials are being placed into the envelope. Your proctor will then place the contents into your envelope. **IT IS THE RESPONSIBILITY OF THE EXAMINEE TO ENSURE THAT ALL TEST MATERIALS ARE RETURNED TO THE PROCTOR. FAILURE TO DO SO WILL RESULT IN YOUR EXAM NOT BEING SCORED AND DISCIPLINARY ACTION WILL BE TAKEN.**